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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,195	06/22/2006	Peter Hildebrand	BEET-13	8405
26875 7590 02/18/2010 WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202				
EXAMINER				
EVANS, GEOFFREY S				
ART UNIT		PAPER NUMBER		
3742				
MAIL DATE		DELIVERY MODE		
02/18/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/552,195

**Applicant(s)**

HILDEBRAND ET AL.

**Examiner**

Geoffrey S. Evans

**Art Unit**

3742

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-25 is/are pending in the application.
- 4a) Of the above claim(s) 21-25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2 and 4-8 is/are allowed.
- 6) ☒ Claim(s) 9-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The drawing sheet received on 24 November 2009 is acceptable.
2. Claims 9-17, and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 9, it is considered to not further limit claim 1 since the processing means recited in claim 9 does not require a laser beam for treating the swage. Claims 10-16 are similarly indefinite. Regarding claim 17, it does not necessarily further limit claim 1 since the processing means recited in claim 17 (ultrasonic waves) does not require a laser beam for treating the swage. Claim 18 the phrase "in particular for performing the method according to claim 1" is indefinite. Please note that an apparatus claim cannot depend from a method claim.
3. Claims 18 -20 are treated as apparatus claims for the remainder of this office action.
4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wrba et al. in WO 00/18525 in view of Opdyke in U.S. Patent No. 5,331,131. Wrba et al. discloses layer wise laser machining a mold. Opdyke teaches apparatus for scanning over the entire surface of the workpiece including the side walls in a specified manner to reduce the debris (swage). It would have been obvious to adapt Wrba et al. in view of Opdyke to provide this to provide apparatus for scanning over the entire surface of the workpiece to reduce the debris (swage). As an apparatus claim no patentable weight is being given to the process steps to remove the swage.

7. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wrba et al. in WO 00/18535 in view of Opdyke as applied to claim 18 above, and further in view of Sako et al. in Japan patent No. 11-170,077. Sako et al. teach using a defocused laser beam to minimize sticking of dross (swage). It would have been obvious to adapt Wrba et al. in view of Opdyke and Sako et al. to provide this to minimize sticking of the swage during the scanning step as taught by Opdyke. Regarding claim 20, defocusing the beam is functionally equivalent to reducing the laser beam power. It would have been obvious to adapt Wrba et al. in view of Opdyke and Sako et al. to provide this as a functionally equivalent method of minimizing the sticking of dross (swage).

8. Applicant's arguments filed 24 November 2009 have been fully considered but they are not persuasive. Regarding claim 18, method limitations have no patentable weight in apparatus claims.
9. Claims 1, 2, 4-8 are allowed.
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Babel et al. in U.S. Patent No. 5,225,650 discloses creating a cavity by layer wise removal (see column 2, lines 15-39).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S. Evans whose telephone number is (571)-272-1174. The examiner can normally be reached on Mon-Fri 7:00AM to 3:30 PM (flexible).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey S Evans/

Primary Examiner, Art Unit 3742